



On the Bayou

JULY 2020



Editor-in-Chief
Suhad Wojkowski

Associate Editors
Trinia Bax
Dawn Reed

Committee Members
Michael Santiago
Christine Sickler
Terri Von Hoven

INSIDE THIS ISSUE:

Events & Observances 2

Safety Corner 4

Human Resources 6

SRRRC Publications 11

Message from the Director

Dr. Deepak Bhatnagar

Thank you for joining our All Staff virtual meeting on June 15, 2020. We had excellent participation with over 90 attendees and a lively question and answer session. I would like to reiterate and update you on some of the points made during the meeting:

- ♦ The Center buildings/facilities are being well maintained and cleaned properly; whenever needed, repairs are made, and the Center is in excellent shape.
- ♦ Human Resources is onboarding new employees virtually, and through a virtual interview, we have hired a new Research Leader for Food Processing and Sensory Quality Research Unit.
- ♦ Our IT staff continues to work to support everyone and facilitate telework. An update on lincpass cards was given by Hans Wientjes, and several cards have been issued. For new certificates, please contact Cisco or Hans.
- ♦ ARMPS review went well with the Area Office. Funding is adequate for now for most research units, but deficiencies are possible in future years. Additional/outside funding is critical, for which communication is ongoing with ONP and stakeholders.
- ♦ 3rd quarter reviews were completed before June 30 deadline. Hopefully everyone communicated with supervisors on how best they utilized their time. Next year performance evaluations will change to a pass/fail system. More details will follow.
- ♦ The status of staff returning to the Center was given by Shannon Beltz. She and Management have developed policies and procedures for our safe return to the building in four Phases. No date has been set for getting back into the Center; the time frame is based on USDA dashboard criteria and local community status. We have acquired the necessary PPEs and cleaning supplies. Phase 1 would allow 25% or about 30 staff members to start back into the facility. A two-week gap is required between each Phase, with no COVID cases.

It is still not clear when Phase 1 will start; it is critical to keep people safe, so stay tuned and be patient.

Caribbean American Heritage Month

Submitted by: Deepak Bhatnagar

Due to unavoidable circumstances, we were not able to celebrate Caribbean American Heritage Month this June. We missed our coffee tasting normally organized by Michael Watson. Even though we weren't able to come together for the event, I wanted to share with you a unique story to commemorate Caribbean American Heritage.

As in all our special observances at SRRC, we learn about different cultures and their people, and are reminded that our greatness lies in our diversity. So in June, we learn about the many and great contributions of immigrants of Caribbean heritage. Caribbean immigrants have been contributing to the well-being of American society since its founding with Alexander Hamilton, the First Secretary of the Treasury who was from the Caribbean island of Nevis to journalist Malcolm Gladwell, whose family tree includes ancestors of West Indian heritage and Jamaican mother. Also among the famous sons and daughters of Caribbean heritage are Secretary of State Colin Powell, Cicely Tyson, W.E.B. Dubois, James Weldon Johnson, Harry Belafonte and Sidney Poitier to name a few.

There are a number of great contributors to America from Caribbean heritage, however one story stands out: the life of **Sonia Sotomayor**, Associate Justice of the Supreme Court.

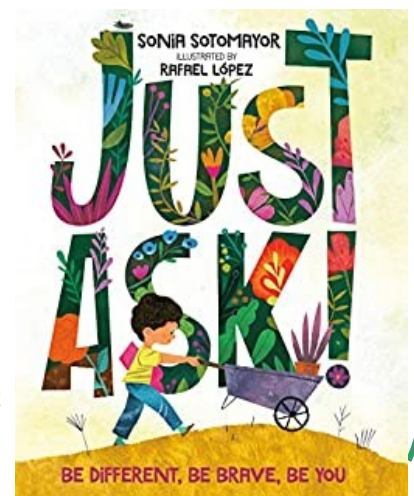


Sonia was born in Bronx, New York, on June 25, 1954. Her father was Juan Sotomayor, from the area of Santurce, San Juan, Puerto Rico, and her mother was Celina Báez, an orphan from the neighborhood of Santa Rosa in Lajas, a rural area on Puerto Rico's southwest coast. Her parents moved to New York City to raise their children. Sotomayor's family functioned on a very modest income – her mother was a nurse at a methadone clinic, and her father was a tool-and-die worker.

In her talks, she often references adversity in her childhood and how she found refuge in her public library where she fostered a love of reading and learning.

Overcoming odds, Sonia is very accomplished person. She earned a B.A. in 1976 from Princeton University, graduating summa cum laude and receiving the university's highest academic honor. In 1979, she earned a J.D. from Yale Law School where she served as an editor of the Yale Law Journal. She served as Assistant District Attorney in the New York County District Attorney's Office from 1979–1984. She then litigated international commercial matters in New York City at Pavia & Harcourt, where she served as an associate and then partner from 1984–1992. In 1991, President George H.W. Bush nominated her to the U.S. District Court, Southern District of New York, and she served in that role from 1992–1998. She served as a judge on the United States Court of Appeals for the Second Circuit from 1998–2009. President Barack Obama nominated her as an Associate Justice of the Supreme Court on May 26, 2009, and she assumed this role August 8, 2009.

Sonia has authored several books, with her most recent one being a children's book entitled, *Just Ask! Be Different, Be Brave, Be You*. In her book, she tells her young readers to ask questions when something seems different or new. She goes on to compare people to her garden, with all its variety. "And just like in our garden, all the ways we are different make our neighborhood—our whole world really—more interesting and fun. And just like all of the plants, each of us has unique powers to share with the world and make it more interesting and richer".



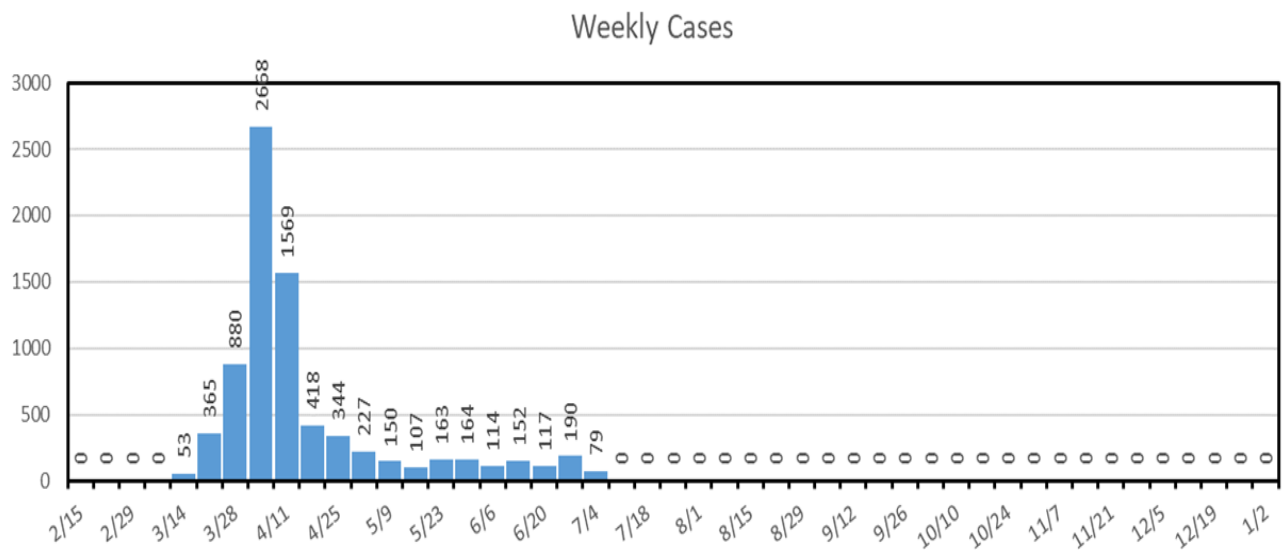
Virtual Seminar: Tracking the COVID19-causing virus

Submitted by: K. Thomas Klasson

On June 29, Dr. Thomas Klasson, Research Leader of the Commodity Utilization Research Unit, gave a presentation titled, "Case study using external data in Excel: Tracking the COVID19-causing virus over time for NOLA." All SRRC staff were invited to join the ZoomGov Meeting.

Thomas showed how to download data files stored (and continuously updated) on the internet into an Excel spreadsheet Data Table and how to use Pivot Tables to extract selective data from the Data Table.

COVID-19 county data for all states were downloaded from John Hopkins University (JHU) and a dynamic spreadsheet was created that could extract county or state data into a format that could be used for plotting cumulative cases over time, daily new cases over time, X-day moving average cases over time, and weekly average cases over time. Any state or county could be reviewed by a click of a button, or two. The spreadsheet could be updated, as daily new information become available from the JHU data web site, with a simple mouse click.



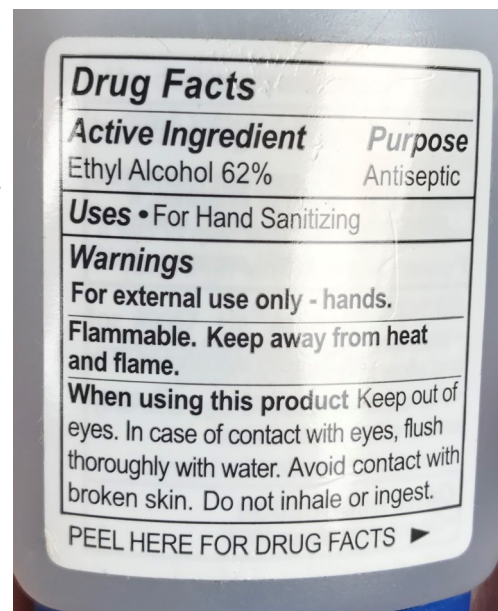
Submitted by: Shannon Beltz

On 6/19/2020, the US Food and Drug Administration advised consumers not to use any hand sanitizer manufactured by Eskbiochem SA de CV in Mexico, due to the potential presence of methanol (wood alcohol), a substance that can be toxic when absorbed through the skin or ingested. FDA has identified the following products manufactured by Eskbiochem which should be immediately discarded:

- All-Clean Hand Sanitizer (NDC: 74589-002-01)
- Esk Biochem Hand Sanitizer (NDC: 74589-007-01)
- CleanCare NoGerm Advanced Hand Sanitizer 75% Alcohol (NDC: 74589-008-04)
- Lavar 70 Gel Hand Sanitizer (NDC: 74589-006-01)
- The Good Gel Antibacterial Gel Hand Sanitizer (NDC: 74589-010-10)
- CleanCare NoGerm Advanced Hand Sanitizer 80% Alcohol (NDC: 74589-005-03)
- CleanCare NoGerm Advanced Hand Sanitizer 75% Alcohol (NDC: 74589-009-01)
- CleanCare NoGerm Advanced Hand Sanitizer 80% Alcohol (NDC: 74589-003-01)
- Saniderm Advanced Hand Sanitizer (NDC: 74589-001-01)

Consumers who have been exposed to hand sanitizer containing methanol should seek immediate treatment, which is critical for potential reversal of toxic effects of methanol poisoning. Substantial methanol exposure can result in nausea, vomiting, headache, blurred vision, permanent blindness, seizures, coma, permanent damage to the nervous system or death.

FDA reminds consumers to wash their hands often with soap and water for at least 20 seconds, especially after going to the bathroom, before eating, and after coughing, sneezing, or blowing one's nose. If soap and water are not readily available, the Centers for Disease Control and Prevention (CDC) recommend consumers use an alcohol-based hand sanitizer that contains at least 60 percent ethanol (not methanol).



For more information please refer to the following resources:

[Read the U.S. Food and Drug Administration Advisory](#)

[Read the US National Library of Medicine - National Institutes of Health Paper](#)

COVID-19 Testing Information

In most cases, anyone is eligible to receive a test AND no health insurance is required. Check these websites for more information and details.



NOLA READY
THE CITY OF NEW ORLEANS

<https://ready.nola.gov/home/>

Testing Information:

<https://ready.nola.gov/incident/coronavirus/testing/#mobiletesting>



JEFFERSON PARISH
LOUISIANA

<https://www.jeffparish.net/>

Testing Information:

<https://www.jeffparish.net/departments/public-information-office/health-update/jefferson-parish-test-sites>



ST. TAMMANY
PARISH GOVERNMENT

<http://www.stpgov.org/>

Testing Information:

<http://www.stpgov.org/covid19>

New Employee

Submitted by: Janell Becker

SRRC proudly welcomes **Dr. Robert T. Mackin**. He is a new postdoc working with Dr. Vince Edwards in the Cotton Chemistry and Utilization Research Unit. Dr. Mackin received his PhD in Chemistry from Tulane University.



Scientific Recognition

Dr. John C. Beaulieu was awarded a successful FY20 1890's Faculty Research Sabbatical Program (FRSP) grant proposal in May 2020.

The grant will facilitate and support an HBCU collaborator, Dr. Alberta Aryee from Delaware State University (<https://cast.desu.edu/about/faculty-profiles/alberta-na-aryee-phd>), for two full summer sabbaticals. Dr. Aryee will work with Dr. Beaulieu's team at the SRRC on sprouted brown rice and African yellow beans. Their project is entitled "Value-added product development from sprouted high-protein brown rice and African yellow beans."

Due to the coronavirus pandemic and ARS travel restrictions and timing logistics, programmatic dates for travel and R&D have been moved forward into FY21 and FY22. Congratulations John!

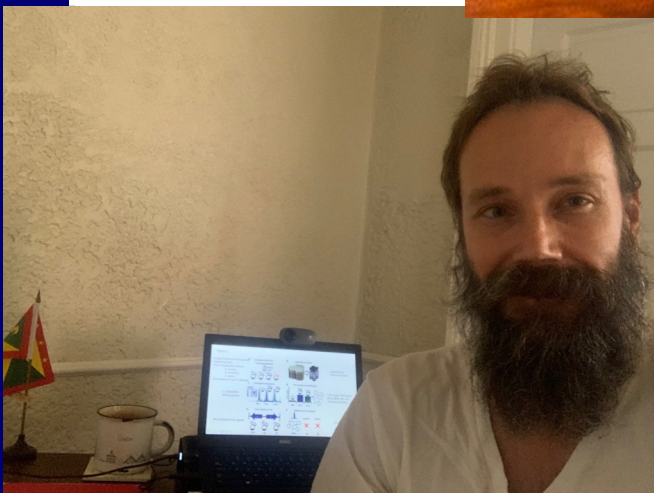
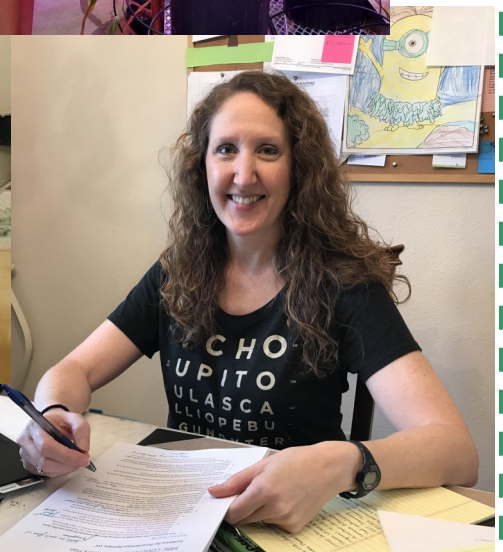
A research paper co-corresponded by Research Plant Physiologist **Dr. Heping Cao** was awarded a "Third Prize" by the Chinese Society of Forestry.

The Chinese Society of Forestry was established in 1917 and currently has more than 90,000 members. The biannual awards were selected by a 20-member committee. The selection criteria for the award were 1) any paper related to forestry, 2) published within the last five years and 3) the first author younger than 40 years old when the paper was published.

Dr. Xiaoming Fan was the first author of the paper and was a Ph.D. student at the time. She currently serves as a faculty member of the Central South University of Forestry and Technology in Changsha, Hunan, China. The citation of the paper is "Fan, X., Yuan, D., Tian, X., Zhu, Z., Liu, M. and Cao, H. Comprehensive transcriptome analysis of phytohormone biosynthesis and signaling genes in the flowers of Chinese chinquapin (*Castanea henryi*). Journal of Agricultural and Food Chemistry. 65(47):10332-10349. 2017. <https://doi.org/10.1021/acs.jafc.7b03755>." Congratulations Heping!

SRRC Employees Busy at Work

PAGE 7



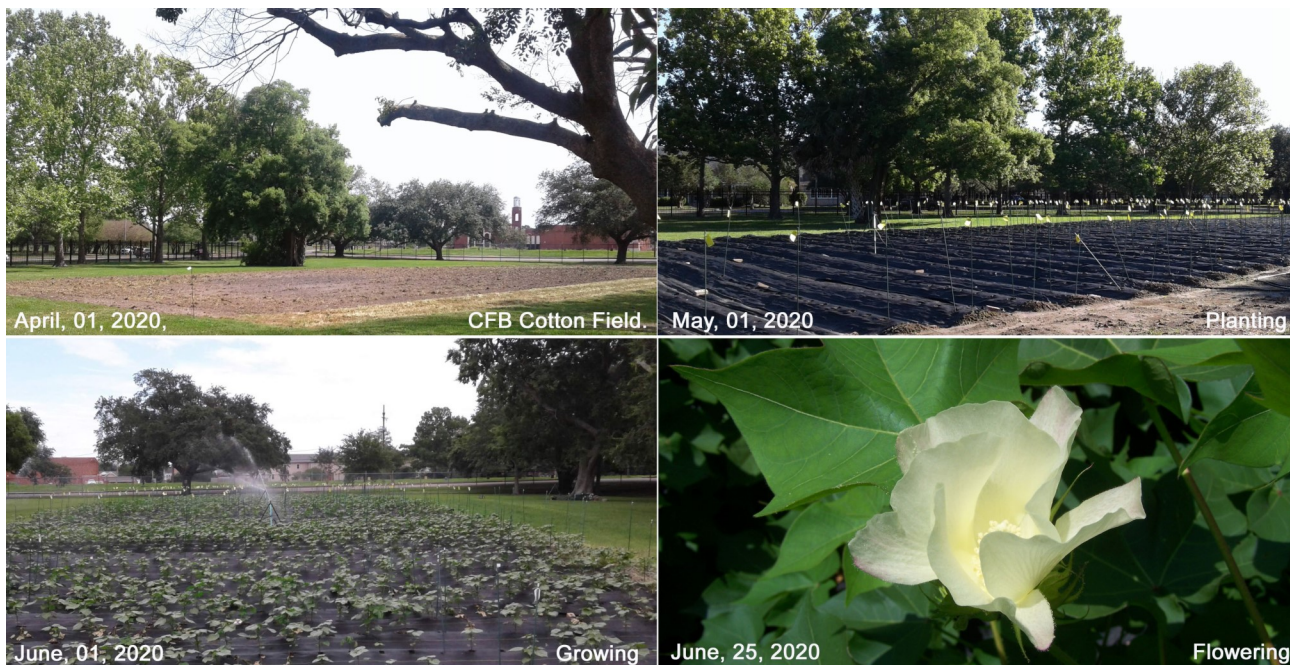
SRRC Employees Busy at Work

PAGE 8

Cotton Fiber Bioscience Cotton Field 2020

Submitted by: Hee-Jin Kim

Amid the Covid-19 closure of the Center, cotton plants in the SRRC fields are blooming. Drs. David Fang, Hee-Jin Kim, Marina Naoumkina, Greg Thyssen, Mr. Chris Florane, and Ms. Ping Li enabled growing cotton plants in the CFB field. Mr. Wilson Buttram and Keith Stevenson, from Ponchartrain Partner, helped in the field's preparation.



A screenshot of one of the SRRC journal club Zoom meetings.



Activities

Submitted by Terri von Hoven

With most of us teleworking due to current events, we felt it important to share a few helpful activities for our staff to consider:

Louisiana Children's Museum: In Dialogue Series, Webinars to address current events

The Louisiana Children's Museum has developed a series of webinars in conjunction with Tulane's Institute of Infant and Early Childhood Mental Health to address current events. The webinars are called *In Dialogue* and are available through the LCM's website, www.lcm.org and the LCM YouTube channel. Topics include *Talking to Your Child About COVID-19* and *Talking with Children About Current Events: Starting Conversations About Racism, Violence, and Justice* with webinars directed to African American parents, Non-African American parents, and Spanish speaking parents. These discussions are not only helpful for parents of school age children but for other adults as well.

The Louisiana Children's Museum YouTube channel:

<https://www.youtube.com/channel/UCBg-lICDFZ-0-H0CoZN-A9A>

Need more happiness? Greater health and wellbeing? Get outdoors and enjoy scenic locations for more than 2 hours a week.

Two studies published in *Scientific Reports* describe how to accomplish improved health, wellbeing and happiness. Green space has been linked to reduced stress and blood pressure, reduced risk of asthma, cardiovascular disease, diabetes, and obesity in children. Conversely, green space has been shown to improve cognitive development of children and mental health of all, as well as increase life expectancy.

In order to study the relationship between self-reported health and wellbeing and contact with nature recreationally, nearly 20,000 responses were selected from a survey of Engagement with the Natural Environment in England. The survey asked participants to record activities and report on their health and wellbeing. The researchers found that there was a significant difference with those who experienced 120 minutes a week in contact with nature as compared to no contact the previous week. Less than 90 minutes was not significantly different than spending no time outdoors. The two hours could be spent in nature in any time intervals, and the findings were consistent across various age ranges (White, et al., 2019).

To enhance the outdoor experience, make it scenic. Another study utilized datasets from an app and an online game to determine if scenic locations made people happier in England. Controlling for green space, researchers found people are happier in scenic places not only in natural locations, but urban areas as well. The results were consistent even when accounting for activity, income, and weather (Seresinhe, et al., 2019). Thus, to feel healthier, happier and better overall, enjoy aesthetically pleasant spots outdoors.

Chanuki Illushka Seresinhe, Tobias Preis, George MacKerron, and Helen Susannah Moat. Happiness is Greater in More Scenic Locations. *Scientific Reports*, 14 March 2019.

Mathew P. White, Ian Alcock, James Grellier, Benedict W. Wheeler, Terry Hartig, Sara L. Warber, Angie Bone, Michael H. Depledge, and Lora E. Fleming. Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*, 13 June 2019.

A Step Back in Time at SRRC

PAGE 10

Submitted by: Christine Sickler



August 28, 1941: View from the top of the administration wing, showing W.P.A. workers leveling ground and pouring concrete curb.

July 1, 1941: Interior view of the industrial wing looking east, showing work about completed.



January 2, 1941: View looking southeast, showing letters being set on the administration wing.

Recent SRRC Publications

Submitted by: Suhad Wojkowski

Full text pdfs of SRRC publications are available in the Eprints database via “Library” link on the SRRC Intranet page: <http://nola.srrc.usda.gov:8000/srrcmenf.htm>

Click on the article's title below to launch the pdf from Eprints.

Dowd, Michael K. (2020) [Stability of the Gossypol-Amine Adducts Used for Chromatographic Measurement of Total and Isomeric Gossypol](#). Journal of the American Oil Chemists' Society, 97. pp. 671-675.

Fontenot, Krystal R. and Edwards, J. Vincent and Haldane, David and Pircher, Nicole and Liebner, Falk and Nam, Sunghyun and Condon, Brian (2020) [Structure/Function Relations of Chronic Wound Dressings and Emerging Concepts on the Interface of Nanocellulosic Sensors](#). In: Lignocellulosics: Renewable Feedstock for (Tailored) Functional Materials and Nanotechnology. Elsevier pp. 249-278.

Musungu, Bryan and Bhatnagar, Deepak and Quiniou, Sylvie and Brown, Robert L. and Payne, Gary A. and O'Brian, Greg and Fakhoury, A.M. and Geisler, Matt (2020) [Use of Dual RNA-seq for Systems Biology Analysis of Zea mays and Aspergillus flavus Interaction](#). Frontiers in Microbiology, 11 (853). pp. 1-19.

Raruang, Yenjit and Omolehin, Olanike and Hu, Dongfang and Wei, Qijian and Han, Zhu-Qiang and Rajasekaran, Kanniah and Cary, Jeffrey W. and Wang, Kan and Chen, Zhi-Yuan (2020) [Host Induced Gene Silencing Targeting Aspergillus flavus aflM Reduced Aflatoxin Contamination in Transgenic Maize Under Field Conditions](#). Frontiers in Microbiology, 11 (754). pp. 1-15.

Thompson, Corey N. and Hendon, Bralio R. and Mishra, Deepika and Rieff, Jacob M. and Lowery, Cindy C. and Lambert, Kimberly C. and Witt, Travis W. and Oswalt, Steven J. and Bechere, E. and Smith, C. Wayne and Cantrell, Roy G. and Kelly, Brendan and Imel-Vise, Robert K. and Chapman, Kent D. and Dowd, Michael K. and Auld, Dick L. (2019) [Cotton \(Gossypium hirsutum L.\) Mutants with Reduced Levels of Palmitic Acid \(C16:0\) in Seed Lipids](#). Euphytica, 215 (112). pp. 1-10.